

EVALUATION OF H. LÉVEILLE'S NEW HAWAIIAN SPECIES
Hawaiian Plant Studies 76

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Abbe' Urbain Faurie was a French Catholic missionary to Japan. When so urged he made a plant collection, and sent it to Abbe (Augustin Abel) Hector Léveillé of Le Mans, France. Léveillé described a large percentage of them as new species, and named most of them Fauriei. Inspired by this distinction, Faurie made more and more collections, and finally resigned from the mission to become a plant collector. From April 1909 to June 1910 he explored the Hawaiian Islands, and collected some 1,160 numbers of plants.

On studying this Hawaiian collection (1911-1913) Léveillé published 114 of them as new species (or varieties). His diagnoses were about four or five lines in length, and seldom gave any measurements, or contained a comparison with the closest known species. His work was hasty and careless, and of his Hawaiian new species about half are synonyms of valid, earlier published species. J. F. Rock (1914) published a critical review of Léveillé's Hawaiian "novelties."

The writer is in general agreement with Rock's treatment, but subsequent monographs, and observations by the writer, have caused numerous changes. Consequently it is desirable to publish a new critique of the Hawaiian species published by Léveillé.

Of the 114 new Hawaiian taxa published by Léveillé 61 are synonyms, 5 have become basionyms, 2 are species *dubia*, and 46 are now accepted as good species or varieties.

Léveillé's Species arranged by Families according to Léveillé. The numbers are the collection numbers

Piperaceae

Peperomia Fauriei 108, Molokai

P. Helleri 109, Molokai

P. refractifolia 123, Molokai = *P. Cookiana* C. DC.

Urticaceae

Pipturus hawaiensis 508, Hawaii

Pittosporaceae

Pittosporum Fauriei 18, 38, Oahu = *P. glabrum* H. & A.

P. Hillebrandii 17, Molokai = *P. insigne* Hbd., var.

Hillebrandii (Lévl.) Sherff

Rosaceae

Rubus Damieni 805, Molokai = *R. hawaiensis* Gray

Rubus Hillebrandii 802, 806, Hawaii, Maui = *R. hawaiiensis* Gray

R. Koehnei 801, Maui, published in 1911, hence the earlier, valid binomial, and *R. penetrans* Bailey, 1933, becomes a synonym.

Rutaceae

Pelea acutivalvata 172, Kauai = *P. peduncularis* Lévl.

P. Fauriei 104, 203, Molokai = *P. clusiaeefolia* Gray, var. *Fauriei* (Lévl.) St. John & Hume

P. Feddei 194, Kauai

P. foetida 193, Maui = *P. molokaiensis* Hbd.

P. grandipetala 4, Oahu = in part *P. honoluluensis* St. John in part *P. peduncularis* Lévl.

P. Hillebrandii 183, 184, Kauai = *P. anisata* Mann

P. Leveillei 1, Kauai

P. nodosa 5, Kauai = *P. anisata* ?

P. oahuensis 11, 217, 217bis, Oahu

P. peduncularis 189, Oahu

P. penduliflora 9, Sandwich Is. = *P. peduncularis* Lévl.

P. singuliflora 194, 195, 224 = in part *P. peduncularis* Lévl.; in part *P. Wawraeana* Rock

P. subpeltata 209, Kauai = *P. anisata* Mann

P. waianaiensis 215, Oahu = *P. peduncularis* Lévl., var. *quadrata* Stone

Euphorbiaceae

Euphorbia Hillebrandi 468, Oahu

Phyllanthus sandwicensis F. Muell., var. *hypoglauca* = *Breynia disticha* Forst f., f. *nivosa* (W. G. Sm.) Croizat

Aquifoliaceae

Byronia Helleri 280, Kauai = *Ilex anomala* H. & A.

Malvaceae

Hibiscus Fauriei 828, Oahu = *H. schizopetalus* (Mast.)

Hook. f., fide Rock; or = *H. Arnottianus* Gray, fide Roe. These two species are strikingly different.

Neither of the botanists could have been mistaken, so there was doubtless a mixed number, with duplicate sheets, each with a different species.

Malva hawaiiensis 855, 858 = *M. moschata* L.

Sida Fauriei 5, Oahu = *Malvastrum coromandelianum* (L.) Garcke

S. oahuensis 839, Oahu = *Malvastrum coromandelianum* (L.) Garcke

S. sandwicensis 6, Sandwich Is. = *S. fallax* Walp.

Sterculiaceae

Waltheria Fauriei 841, Oahu - *Triumfetta Bartramia* L.

Violaceae

Isodendrion (as *Isodendron*) *Fauriei* 693, Molokai = *Gouania Hillebrandi* Oliver in Hbd.

Viola sandwicensis 1, Oahu - *Cyrtandra sandwicensis* (Lévl.) St. John & Storey

Thymeliaceae

Wikstroemia Fauriei 548, Maui = *W. sandwicensis* Meisn.
in A. DC.

Myrtaceae

X Nania Fauriei 27, Molokai. = *Metrosideros polymorpha*
Gaud., ssp. *incana* (Lévl.) Skottsb., var. *Fauriei*
(Levl.) Skottsb.

X N. Feddei 32, Kauai = *Metrosideros tremuloides* (Heller)
Rock, fide Rock, but that species is known only on Oahu.

N. macropus (H. & A.) Ktze., f. *microphylla* 26, Kauai.
This has not been seen or placed.

N. polymorpha (Gaud. Heller, var. *incana* 28, Molokai
= *Metrosideros polymorpha* Gaud., subsp. *incana*
(Lévl.) Skottsb.

N. polymorpha (Gaud.) Heller, var. *glaberrima* 35, Oahu.
= *Metrosideros polymorpha* Gaud. subsp. *glaberrima*
(Lévl.) Skottsb.

N. polymorpha (Gaud.) Heller, var. *nummulariaefolia* 34,
Hawaii. = *Metrosideros polymorpha* Gaud., var.
polymorpha.

N. polymorpha (Gaud.) Heller, var. *sessilis* 32. Oahu.
This has not been seen or reassigned.

Araliaceae

Cheirodendron trigynum (Gaud.) Heller, var. *Hawaiensis*
262, = var. *trigynum*.
var. *Kauaiensis* 266 = *C. Fauriei* Hochr., Kauai.
var. *mauiensis* 265, Maui.

Ericaceae

Vaccinium Fauriei 700, 702, Molokai = *V. calycinum* Sm.,
var. *calycinum*, f. *Fauriei* (Lévl.) Skottsb.

V. hamatidens 699, Kauai = *V. calycinum* Sm., var.
calycinum, f. *hamatidens* (Lévl.) Fosb.

Epacridaceae

Cyathodes imbricata Stscheegl., var. *volcanica* 442, 445,
Hawaii = *Styphelia Douglasii* (Gray) F. Muell. ex Skottsb.

Myrsinaceae

Myrsine Fauriei 422, 423, 427, Oahu = *M. Lessertiana* A. DC.
M. molokaiensis 435, Molokai = *Planchonella spathulata*
(Hbd.) Pierre, var. *molokaiensis* (Lévl.) St. John.
var. *punctata* 447, Kauai = *M. punctata* (Lévl.)
Wilbur.

M. sandwicensis A. DC., var. *mauiensis* 449, Maui.

M. Vanioti 448, Oahu = *M sandwicensis* A. DC.

Suttonia apodocarpa 446, Kauai = *Myrsine punctata*
(Lévl.) Wilbur.

S. cuneata 2, 3, 431, Hawaii = *Myrsine Lessertiana* A. DC.

S. flavidia 4, 5, Maui = *Myrsine Lessertiana* A. DC.

S. mauiensis 449, Maui = *Myrsine sandwicensis* A. DC.,
var. *mauiensis* Lévl.

S. Meziana 428, = *Myrsine Meziana* (Lévl.) Wilbur.

Suttonia pukooensis 426, Molokai = *Myrsine pukooensis* (Lévl.) Hosaka.
S. punctata 447, Kauai = *Myrsine punctata* (Lévl.) Wilbur
S. Vanioti 448, Oahu = *Myrsine sandwicensis* A. DC.
 Primulaceae
Lysimachia daphnoides Hbd., var. *Fauriei* 708, Oahu
 = *L. Hillebrandii* Hook. f. ex Gray.
 Apocynaceae
Alyxia (as *Alixia*) *myrtillaefolia* (Gray) Lévl., 455,
 Molokai = *A. olivaeformis* Gaud., f. *myrtillaefolia*
 (Gray ex Hbd.) St. John.
 Convolvulaceae
Ipomoea *Fauriei* 1,035, 1,049 = *I. stolonifera* (Cyrill.)
 J. F. Gmel.
I. koloensis 1,036, Kauai = *I. stolonifera* (Cyrill.)
 J. F. Gmel. Rock called this *I. pes-caprae* Sw., so
 the several sheets under this number may have contained
 a mixture.
 Labiatae
Stenogyne *Fauriei* 911 = *Coleus* *Blumei* Benth.
 Solanaceae
Solanum *Fauriei* 861 = *S. nigrum* L.
 Scrophulariaceae
Herpestis *Fauriei* 1,126, Hawaii = *Bacopa Monnieria*
 (L.) Wettst.
Veronica *hawaiensis* 892, Hawaii = *V. arvensis* L.
 Gesneriaceae
Cyrtandra asaroides in part, 623, Kauai = *C. oenobarba*
 Mann, var. *oenobarba*.
 in part, 624, Kauai = *C. oenobarba* Mann, var.
petiolaris (Wawra) Clarke
C. Fauriei 632, Molokai = *C. lysiosepala* (Gray) Clarke,
 var. *Fauriei* (Lévl.) Rock
C. Kamoloensis 646, Molokai = *C. Grayana* Hbd.
C. oahuensis 638, Oahu
C. Vanioti 1,144, Oahu
C. Wainihaensis 640, Oahu (probably = Kauai), not seen.
 Myoporaceae
Myoporum *Fauriei* 677, Molokai = *M. sandwicense* Gray,
 subsp. *Fauriei* (Lévl.) Kraenzlin
 Plantaginaceae
Plantago *Fauriei* 1,078, Kauai = *P. princeps* C. & S.,
 var. *longibracteata* Mann
P. Gaudichaudiana 1,075, Hawaii = *P. hawaiensis* (Gray)
 Pilger, var. *hawaiensis*
 Rubiaceae
Coprosma *Fauriei* 330, Kauai = *C. stephanocarpa* Hbd.
C. parvifolia = *C. stephanocarpa* Hbd. The data 324 and
 Molokai supplied by Rock (1914: 358).
Gouldia cirrhoptiolata 344, 416, Maui, Molokai.
 Of two different hybrids, fide Fosberg.

Kadua herbacea 368, Maui = *Hedyotis Cookiana* (C. & S.) Steud., var. *herbacea* (Lévl.) Fosb.

Straussia Fauriei 400, Oahu = *Psychotria Fauriei* (Lévl.) Fosb.

Cucurbitaceae

Sicyos Fauriei 877, Oahu = *Momordica charantia* L.

Lobeliaceae

Clermontia carinifera 10, Kauai = a species *dubia*, fide Rock.

C. Fauriei 578, Kauai = *C. clermontioides* (Gaud.) Heller

C. fulva 11, Kauai

Cyanea Blinii 575, Hawaii = *Clermontia parviflora* Gaud.

C. Fauriei 565, 591, Kauai = *C. coriacea* (Gray) Hbd., var. *Fauriei* (Lévl.) E. Wimm.

C. Feddei 567, Kauai = *C. fissa* (Mann) Hbd.

C. multispicata 576, 594, Kauai

C. salicina 569, Kauai. Described from a specimen with only leaves. Species *dubia*.

Delissea Fauriei 572, Molokai. Not seen by Rock, Wimmer, or the writer. The genus is otherwise unknown on Molokai.

Rollandia Fauriei 568, Kauai = *Cyanea spathulata* (Hbd.) Heller

Goodeniaceae

X Scaevola Blinii 661, Kauai = *S. procera* Hbd.

S. Chamissonis Gaud, var. *caeruleascens* 659, Kauai

S. Fauriei 651, Kauai = *S. Taccada* (Gaertn.) Roxb., var. *Fauriei* (Lévl.) St. John

Compositae

Ageratum sandwicensis 940, Maui, not seen, but probably = *A. conyzoides* L.

Campylotheca rutifolia = *Bidens Hillebrandiana* (Drake) Deg. ex Sherff

Cnicus hawaiensis 963, Hawaii = *Cirsium arvense* L. ? fide Rock

Crepis molokaiensis 974, 976, Molokai = *Hypochoeris radicata* L.

Dubautia Faurie 920, Maui - *D. laxa* H. & A., var. *hirsuta* Hbd.

Lipochaeta asymmetrica 960, Oahu = *Bidens asymmetrica* (Lévl.) Sherff

L. Fauriei 1,012, Kauai

L. variolosa 1,008, 1,009, Molokai, Kauai = *L. succulenta* (H. & A.) DC., Gardner chose 1,008 as lectotype.

Railliaridia Fauriei 1,015, Hawaii = *R. ciliolata* DC., var. *laxiflora* (DC.) Sherff

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